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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/586,531	05/31/2000	Shai Mohaban	50325-0085	6019

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EXAMINER	
FERRIS, DERRICK W	

ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/586,531	MOHABAN ET AL.	
	Examiner	Art Unit	
	Derrick W. Ferris	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-8,10-12,14-18,20-23,25-31 and 33-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8,10-12,14-18,20-23,25-31 and 33-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 May 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. **Claims 1-2, 4-8, 10-12, 14-18, 20-23, 25-31, and 33-38** as amended are still in consideration for this application. Applicant has amended claims **1, 11, 21, and 22**. Applicant has canceled claims 3, 13, 24, 32.

2. Examiner **withdraws** the corresponding obviousness rejection(s) to *Gai* in view of *Baugher* and *Martin* and in further view of *Berne* and *Branden*. Examiner thanks applicant for attempting to further clarify the claimed subject matter. However, examiner feels that the above limitations added would have been obvious to one skilled in the art prior to applicant's invention. In particular, as pointed out by applicant, at least *Gai* teaches communicating with a policy server (e.g., see PS1 in Fig. 1 of *Gai*) where the PS stores the policy information defining whether a proxy node should initiate network resource reservations for a particular traffic flow and based on the policy information stored at the proxy server, determine whether to establish a network resource reservation. Examiner notes that it would have been obvious to one skilled in the art to move this same information/functionality to a proxy node. In particular, *RFC 2748* – The COPS (Common Open Policy Service) Protocol provides such a teaching and a motivation. Specifically, see e.g., figure 1 in Section 1.1 where the Policy Decision Point (PDP) can be located either remotely or locally. As such, in the absence of a remote PDP, the network node (e.g., the proxy) would use the local PDP (LPDP) to make local policy decisions. Hence, *RFC 2748* teaches that the PDP can be located either at the Policy Server or at the network node such that both options are possible thus providing a motivation. Specifically, a motivation to use a LPDP would be for fault tolerance as mentioned in Section 1.1 of *RFC 2748*. Specifically, even

though the remote PDP remains the "authoritative decision point at all times", should the remote PDP go off-line for an extended period of time then the local PDP would make all the decisions. Such decisions would then be forwarded to the remote PDP once back on-line for synchronization purposes (see also Section 2.5). Hence as long as the remote PDP is absent the local PDP will make the decisions reading on the above claim limitations at issue.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-2, 4-7, 10-12, 14-17, 20-23, 25-28, 30, 31, 33-36 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over "RSVP Receiver Proxy" to *Gai et al.* ("*Gai*") in view of U.S. Patent No. 6,101,549 to *Baugher et al.* ("*Baugher*") and U.S. Patent No. 6,765,927 B1 to *Martin et al.* ("*Martin*") and in further view of U.S. Patent Application 2004/0022191 A1 to *Bernet et al.* ("*Bernet*"), "Resource Reservation Protocol (RSVP) Version 1 Function Specification" to *Branden et al.* ("*Branden*") and RFC 2748 - The COPS (Common Open Policy Service) Protocol to *Durham et al.* ("*Durham*").

As to **claim 1**, *Gai* in figure 1 (page 6) discloses a sending host H1, a receiving host H2 and an RSVP receiver proxy as R1. The proxy server PS1 helps in determining whether to make the reservation, see e.g., page 7. However, the RSVP proxy receiver generates and communicates a RESV message in addition to acting as a router, thus also acting in the determination process (see sections 3-4).

Gai may not clearly teach determining both next and previous hop parameter values associated with the anticipated traffic flow. However, examiner notes that the limitation is taught given a reasonable but broad interpretation of the claims. In particular, *Gai* recommends placing the proxy as close to the source and provides an example of the proxy adjacent to the source. However, *Gai* also teaches that the proxy can be placed closer to a destination. Thus in placing the proxy further away from the source, one would be motivated to determine both a next and previous hop parameter given a reasonable but broad interpretation of the claimed subject matter. Examiner notes further support as taught in sections 4 and 4.1 of *Gai*. However, should the interpretation be incorrect, examiner also notes the following obviousness rejection below.

Examiner purposes to modify *Gai* to further clarify determining both next and previous hop parameter values associated with the anticipated traffic flow.

Examiner notes that it would have been obvious to someone skilled in the art prior to applicant's invention to determine both the next and previous hop parameters. In particular, *Baugher* provides motivation and support by disclosing a similar RSVP proxy (typically implemented in a firewall) which determines a previous and next hop as shown in figure 3. Thus *Baugher* also provides additional support for determining previous and next hop parameters. Examiner has also supplied the *Braden* reference for further clarification of PHOP and NHOP with respect to RSVP. In particular, see page 37 with respect to RSVP PHOP and page 39 with respect to RSVP NHOP. With respect to the rejection, it would have been obvious to one skilled in the art prior to applicant's invention to include the functional components of RSVP such as PHOP and NHOP since

these fields are supported per the RSVP specification as taught by *Braden*. Thus *Braden* teaches the motivation for specifically using PHOP and NHOP.

Examiner notes that *Gai* may also not clearly teach determining traffic (i.e., network and transport) parameter values associated with the anticipated traffic flow. Examiner notes given a reasonable but broad interpretation of the claims the above-limitation is taught at e.g., Section 4.1 on pages 8-9 of *Gai*. In particular, these parameters are taught as part of DSCP and DCLASS. However, to further clarify the rejection in further context of applicant's invention, the examiner has supplied an additional reference.

Thus the examiner purposes to modify *Gai* to further clarify how the RSVP messages can contain QoS (i.e., traffic parameter values).

Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include determining traffic (i.e., network and transport) parameter values associated with the anticipated traffic flow. In particular, one skilled in the art would have been motivated to make the modification in order to support QoS. *Bernet* further teaches the motivation in e.g., the Abstract. Examiner furthermore notes a reasonable expectation of success since *Bernet* further teaches using a proxy, see e.g., paragraph 0055 at page 6. Thus in clarifying the rejection, *Bernet* teaches performing QoS for RSVP using both quantitative services as well as qualitative service (e.g., see paragraph 0038 at page 4). In addition, *Bernet* also provides a finer grained relationship using the qualitative service e.g., see paragraph 0046 at page 5.

Examiner notes that it also may not be clear from *Gai* that the proxy receiver makes a step of determination with respect to determining, at a proxy node, whether to establish the network resource reservation. In particular, *Gai* teaches that both the proxy receiver and the policy server are used for a determination step, see e.g., page 7 of *Gai*. *Gai* also further teaches that the proxy receiver acts as both a router and generates a RSVP Resv message on behalf of the receiver, see e.g., page 3. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to further include the limitation of determining, at a proxy node, whether to establish the network resource reservation. In particular, one skilled in the art would have been motivated to perform a step of determining at the proxy receiver since the proxy receiver maintains the routing function. In particular, *Martin* teaches the above motivation at e.g., column 6, lines 1-24. Specifically note that *Martin* also teaches a proxy receiver as shown in figure 4 thus creating a reasonable expectation of success for combing the above references. Also note that switch 440 (i.e., the proxy receiver) is a router, see e.g., column 5, lines 44-47. In addition, examiner notes that it may not be clear from the above references that the proxy node determines information defining whether a proxy node should initiate network resource reservations for a particular traffic flow and based on the policy information stored at the proxy server, determine whether to establish a network resource reservation. In particular, *Gai*, as mentioned above teaches that the policy server provides such decisions. Examiner proposes to modify *Gai* to clarify that it is well known in the art to also locate such information/functionality at the proxy node. Hence examiner notes that it would have been obvious to one skilled in the art prior to

applicant's invention to further include the above limitation at issue. In particular, one skilled in the art would have been motivated to perform policy decisions and the like at the proxy node (i.e., local node) for the purpose of fault tolerance. As such, *Durham* teaches the above limitation e.g., in Section 1.1 as part of a LPDP. Thus *Durham* also provides a motivation of fault tolerance as further taught in Section 1.1.

As to **claim 2**, see section 3 on page 7 where examiner notes a reasonable but broad interpretation of "traffic parameter values". See also figures 2 and 3 of *Bernet*.

As to **claim 4**, *Bernet* further clarifies that QoS can be determined either by flow or by application thus meeting the claimed limtiation.

As to **claims 5-6**, see section 4.1 of *Gai* on page 8. Rate and size of packets are shown as part of the policy data and/or flow descriptors as is known in the art for QoS (i.e., in support of the QoS spec). See also paragraph 0034 on page 3 of *Bernet*.

As to **claim 7**, see sections 3 and 4 of *Gai* where examiner notes a reasonable but broad interpretation of additional anticipated traffic flow attributes.

As to **claim 10**, using a broad but reasonable interpretation of "adjacent to the path" it would have been obvious to someone skilled in the art prior to applicant's invention to attach a proxy receiver adjacent to the path. As support and motivation, *Gai* teaches a proxy node that is adjacent to the path (see figure 1 of *Gai*) as either a router or part of a policy server. As further support, see figure 3 of *Baugher* which teaches another interpretation of an adjacent proxy device.

As to **claim 11**, in addition to the rejection to claim 1, *Gai* is silent or deficient on how the concept of an RSVP receiver should be implemented (i.e., in reference to using a

computer readable medium). Examiner notes it would have been obvious to someone skilled in the art to implement the functionality of *Gai* as a computer readable medium. Examiner notes a design choice/decision as the motivation.

As to **claim 12**, see the rejection for claim 2.

As to **claim 14**, see the rejection for claim 4.

As to **claim 15**, see the rejection for claim 5.

As to **claim 16**, see the rejection for claim 6.

As to **claim 17**, see the rejection for claim 7.

As to **claim 20**, see the rejection for claim 10.

As to **claim 21**, see similar rejection for claim 1.

As to **claim 22**, in addition to rejection for claim 11, *Gai* is silent or deficient to using a processor. Examiner notes that it would have been obvious to someone skilled in the art prior to applicant's invention to use a processor. As support, *Baugher* cures the deficiency by disclosing a CPU 32 (figure 2) of a host computer system such as a proxy host. Thus *Baugheri* provides a motivation for using a processor for an RSVP proxy.

As to **claim 23**, see the rejection for claim 2.

As to **claim 25**, see the rejection for claim 4.

As to **claim 26**, see the rejection for claim 5.

As to **claim 27**, see the rejection for claim 6.

As to **claim 28**, see the rejection for claim 7.

As to **claim 30**, see the rejection for claim 10.

As to **claim 31**, see the rejection for claim 2.

As to **claim 33**, see the rejection for claim 4.

As to **claim 34**, see the rejection for claim 5.

As to **claim 35**, see the rejection for claim 6.

As to **claim 36**, see the rejection for claim 7.

As to **claim 38**, see the rejection for claim 10.

5. **Claims 8, 18, 29 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over "RSVP Receiver Proxy" to *Gai et al.* ("*Gai*") in view of U.S. Patent No. 6,101,549 to *Baugher et al.* ("*Baugher*") and U.S. Patent No. 6,765,927 B1 to *Martin et al.* ("*Martin*") and in further view of U.S. Patent Application 2004/0022191 A1 to *Bernet et al.* ("*Bernet*"), "Resource Reservation Protocol (RSVP) Version 1 Function Specification" to *Branden et al.* ("*Branden*") and "Speech communication for working group based on LAN" to *Lin et al.* ("*Lin*").

As to **claim 8**, *Gai, Baugher, Martin, Bernet* and *Branden* are silent or deficient to using an IP phone in particular. Examiner notes that it would have been obvious to someone skilled in the art prior to applicant's invention to use a non-RSVP IP device in general, and more particular and IP phone as a host. *Gai* provides motivation by representing any IP device that does not support RSVP which could be an IP phone. *Lin* helps cure the deficiency by disclosing an IP phone thus teaching that an IP device can be a telephone [page 880 left-hand column].

As to **claim 18**, see the rejection for claim 8.

As to **claim 29**, see the rejection for claim 8.

As to **claim 37**, see the rejection for claim 8.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663

DWF

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